# Complete Summary

#### TITLE

Glaucoma screening: percentage of Medicare members who received a glaucoma eye exam in the last two years by an eye-care professional.

# SOURCE(S)

National Committee for Quality Assurance (NCQA). HEDIS 2006. Health plan employer data & information set. Vol. 2, Technical specifications. Washington (DC): National Committee for Quality Assurance (NCQA); 2005. 350 p.

#### Measure Domain

#### PRIMARY MEASURE DOMAIN

#### **Process**

The validity of measures depends on how they are built. By examining the key building blocks of a measure, you can assess its validity for your purpose. For more information, visit the Measure Validity page.

### SECONDARY MEASURE DOMAIN

Does not apply to this measure

# **Brief Abstract**

## **DESCRIPTION**

This measure is used to assess the percentage of Medicare members 65 years and older without a prior diagnosis of glaucoma or glaucoma suspect who received a glaucoma eye exam in the last two years by an eye-care professional for early identification of persons with glaucomatous conditions. An eye-care professional is defined as an ophthalmologist or optometrist.

# **RATIONALE**

People older than 60, African or Asian Americans over 40, diabetics, and people with a family history of glaucoma are more likely to have glaucoma. Screening for glaucoma among persons at high risk, such as the elderly is an important prevention strategy to identify patients with glaucoma and encourage early treatment to prevent glaucomatous eye damage. Studies have shown routine eye exams in the elderly are associated with maintaining reading ability and vision,

especially for diabetic patients. Comprehensive eye exams include tests that assess eye pressure, provide optic nerve imaging and visual field examination that can detect glaucoma.

In 2002, Medicare provided beneficiaries with new coverage for screening individuals at high risk for glaucoma, individuals with a family history of glaucoma, and diabetic patients. Early screening helps to prevent vision defects related to glaucoma; however, the rate of comprehensive eye exams in the elderly is only 42 percent to 48 percent, according to data in the Medicare fee-for-service population. Screening rates in the managed care population, based on National Committee for Quality Assurance (NCQA) field test results, showed a total rate of 75 percent, and ranged from 54 percent to 93 percent in several health plans.

### PRIMARY CLINICAL COMPONENT

Glaucoma screening

# DENOMINATOR DESCRIPTION

Medicare members age 67 years and older as of December 31 of the measurement year (see the "Description of Case Finding" and "Denominator Inclusions/Exclusions" fields in the Complete Summary)

### NUMERATOR DESCRIPTION

Members from the denominator who received one (or more) eye exams for glaucoma by an eye care professional (ophthalmologist or optometrist) during the measurement year or the year prior to the measurement year (see the related "Denominator Inclusions/Exclusions" field in the Complete Summary)

#### Evidence Supporting the Measure

### EVIDENCE SUPPORTING THE CRITERION OF QUALITY

- A clinical practice guideline or other peer-reviewed synthesis of the clinical evidence
- A formal consensus procedure involving experts in relevant clinical, methodological, and organizational sciences
- One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

# Evidence Supporting Need for the Measure

#### NEED FOR THE MEASURE

Overall poor quality for the performance measured Use of this measure to improve performance Variation in quality for the performance measured

### EVIDENCE SUPPORTING NEED FOR THE MEASURE

National Committee for Quality Assurance (NCQA). The state of health care quality 2005: industry trends and analysis. Washington (DC): National Committee for Quality Assurance (NCQA); 2005.

#### State of Use of the Measure

# STATE OF USE

Current routine use

#### **CURRENT USE**

Accreditation

Decision-making by businesses about health-plan purchasing Decision-making by consumers about health plan/provider choice Internal quality improvement

#### Application of Measure in its Current Use

### CARE SETTING

Managed Care Plans

# PROFESSIONALS RESPONSIBLE FOR HEALTH CARE

Physicians

# LOWEST LEVEL OF HEALTH CARE DELIVERY ADDRESSED

Single Health Care Delivery Organizations

TARGET POPULATION AGE

Age greater than or equal to 67 years

TARGET POPULATION GENDER

Either male or female

#### STRATIFICATION BY VULNERABLE POPULATIONS

Unspecified

#### Characteristics of the Primary Clinical Component

### INCIDENCE/PREVALENCE

Glaucoma is a significant cause of legal blindness in this country and is the single most common cause of irreversible blindness among Africa-Americans in the United States. An estimated 130,000 Americans are legally blind due to glaucoma. It is estimated that at least 4.2 million individuals have glaucoma, although nearly half are probably not aware of this, and another five to ten million individuals have elevated intraocular pressure (IOP), which when treated in higher-risk individuals, can effectively delay or prevent glaucomatous damage. It is estimated that glaucoma affects two to three percent of the elderly population, and another four to seven percent of the U.S. population older than 40 years have elevated IOP without detectable glaucomatous damage on standard clinical tests. Over 2 years of follow-up, the risk of legal blindness (20/200 or worse) from newly diagnosed and treated ocular hypertension or primary open-angle glaucoma in a Caucasian population was estimated to be 27% in at least one eye, and 9% in both eyes. The risk was highest in those individuals who already had evidence of disc or visual field damage at the time of diagnosis.

## EVIDENCE FOR INCIDENCE/PREVALENCE

Hattenhauer MG, Johnson DH, Ing HH, Herman DC, Hodge DO, Yawn BP, Butterfield LC, Gray DT. The probability of blindness from open-angle glaucoma. Ophthalmology1998 Nov; 105(11): 2099-104. PubMed

Hiller R, Kahn HA. Blindness from glaucoma. Am J Ophthalmol1975 Jul; 80(1):62-9.

Kahn HA. Statistics in blindness. In: The model reporting area 1969-1970. Washington (DC): US, DHEW; 1973. (PHS Pub no. (NIH); no. 73-427).

Kass MA, Heuer DK, Higginbotham EJ, Johnson CA, Keltner JL, Miller JP, Parrish RK 2nd, Wilson MR, Gordon MO. The Ocular Hypertension Treatment Study: a randomized trial determines that topical ocular hypotensive medication delays or prevents the onset of primary open-angle glaucoma. Arch Ophthalmol2002 Jun; 120(6): 701-13; discussion 829-30. PubMed

Prevent Blindness America, National Eye Institute. Vision problems in the US. [internet]. Schaumburg (IL): Prevent Blindness America; 2002[cited 2003 Feb 13]. [42 p].

# ASSOCIATION WITH VULNERABLE POPULATIONS

See "Rationale" and "Incidence/Prevalence" fields.

# **BURDEN OF ILLNESS**

See "Incidence/Prevalence" field.

#### UTILIZATION

Unspecified

**COSTS** 

## Institute of Medicine National Healthcare Quality Report Categories

**IOM CARE NEED** 

Staying Healthy

IOM DOMAIN

Effectiveness

#### Data Collection for the Measure

#### CASE FINDING

Both users and nonusers of care

### DESCRIPTION OF CASE FINDING

Medicare members age 67 years and older as of December 31 of the measurement year who were continuously enrolled during the measurement year and the year prior to measurement year with no more than one gap in enrollment of up to 45 days during each year of continuous enrollment

### DENOMINATOR SAMPLING FRAME

Enrollees or beneficiaries

#### DENOMINATOR INCLUSIONS/EXCLUSIONS

## Inclusions

Medicare members age 67 years and older as of December 31 of the measurement year

#### **Exclusions**

The managed care organization (MCO) may exclude members who had a prior diagnosis of glaucoma or glaucoma suspect in the measurement year or the year prior to the measurement year. Use the International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) codes in Table GSO-B of the original measure documentation to identify members with diagnoses of glaucoma or glaucoma suspect in administrative data. The exclusion must have occurred on or before the end of the measurement year.

### DENOMINATOR (INDEX) EVENT

Patient Characteristic

### DENOMINATOR TIME WINDOW

Time window precedes index event

# NUMERATOR INCLUSIONS/EXCLUSIONS

## Inclusions

Members from the denominator who received one (or more) eye exams for glaucoma by an eye care professional (ophthalmologist or optometrist) during the measurement year or the year prior to the measurement year. A member is considered to have had an eye exam for glaucoma if a submitted claim/encounter contains any one of the specified codes\* for glaucoma screening.

\*Refer to Table GSO-A in the original measure documentation for Current Procedure Terminology (CPT) and International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) codes to identify glaucoma screening eye exams.

Exclusions Unspecified

NUMERATOR TIME WINDOW

Fixed time period

DATA SOURCE

Administrative data

LEVEL OF DETERMINATION OF QUALITY

Individual Case

PRE-EXISTING INSTRUMENT USED

Unspecified

#### Computation of the Measure

**SCORING** 

Rate

INTERPRETATION OF SCORE

Better quality is associated with a higher score

ALLOWANCE FOR PATIENT FACTORS

Unspecified

STANDARD OF COMPARISON

## **Evaluation of Measure Properties**

### EXTENT OF MEASURE TESTING

Unspecified

## Identifying Information

ORIGINAL TITLE

Glaucoma screening in older adults (GSO).

MEASURE COLLECTION

HEDIS® 2006: Health Plan Employer Data and Information Set

MEASURE SET NAME

**Effectiveness of Care** 

**DEVELOPER** 

National Committee for Quality Assurance

**ADAPTATION** 

Measure was not adapted from another source.

RELEASE DATE

2004 Jan

**REVISION DATE** 

2005 Jan

**MEASURE STATUS** 

This is the current release of the measure.

SOURCE(S)

National Committee for Quality Assurance (NCQA). HEDIS 2006. Health plan employer data & information set. Vol. 2, Technical specifications. Washington (DC): National Committee for Quality Assurance (NCQA); 2005. 350 p.

#### MEASURE AVAILABILITY

The individual measure, "Glaucoma Screening in Older Adults (GSO)," is published in "HEDIS 2006. Health Plan Employer Data & Information Set. Vol. 2, Technical Specifications."

For more information, contact the National Committee for Quality Assurance (NCQA) at 2000 L Street, N.W., Suite 500, Washington, DC 20036; Telephone: 202-955-3500; Fax: 202-955-3599; Web site: www.ncqa.org.

#### COMPANION DOCUMENTS

The following is available:

 National Committee for Quality Assurance (NCQA). The state of health care quality 2005: industry trends and analysis. Washington (DC): National Committee for Quality Assurance (NCQA); 2005. 74 p.

For more information, contact the National Committee for Quality Assurance (NCQA) at 2000 L Street, N.W., Suite 500, Washington, DC 20036; Telephone: 202-955-3500; Fax: 202-955-3599; Web site: <a href="https://www.ncqa.org">www.ncqa.org</a>.

#### NQMC STATUS

This NQMC summary was completed by ECRI on May 25, 2005. The information was verified by the measure developer on December 15, 2005.

## **COPYRIGHT STATEMENT**

This NQMC summary is based on the original measure, which is subject to the measure developer's copyright restrictions.

For detailed specifications regarding the National Committee on Quality Assurance (NCQA) measures, refer to HEDIS Volume 2: Technical Specifications, available from the NCQA Web site at <a href="https://www.ncqa.org">www.ncqa.org</a>.

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